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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,115	08/21/2003	Toshisada Koyama	051319-0052	6684

29619 7590 02/14/2006

SCHULTE ROTH & ZABEL LLP
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919 THIRD AVENUE
NEW YORK, NY 10022

EXAMINER

EVANS, JEFFERSON A

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,115

Applicant(s)

KOYAMA, TOSHISADA

Examiner

Jefferson A. Evans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6-13-05
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3 to 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 1 to 7 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al (U.S. 5,529,404).

As per Claim 1

Robinson discloses a pivot assembly for a disk drive (figure 4 and column 5 – lines 1 to 38) which utilizes laser welding rather than adhesives in the assembly of the pivot assembly. Figure 4 discloses upper 71 and lower 68 ball bearings (although the figure appears to mistakenly use the reference character 78 to indicate the lower ball bearing) with the outer races of the upper and lower ball bearings being separated by a spacer 69 (although the figure appears to have a second error in that the lead line from reference character 69 stops short rather than extending all the way to the spacer).

Robinson sets forth that the outer races of the ball bearings are laser welded to a sleeve 80 but does not expressly state that the spacer is laser welded to the outer races of the ball bearings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to laser weld the outer races of the ball bearings of Robinson to the

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spacer. The motivation would have been: Robinson indicates that the number of welds may be increased to provide the desired axial strength and as the spacer plays an important role in the positioning of the ball bearings and the axial strength of the pivot assembly, one of ordinary skill in the art would have been led to laser weld the outer races of the ball bearings to the spacer.

As per Claim 2

It would have been obvious to one of ordinary skill in the art at the time the invention was made to laser weld the outer races of the ball bearings of Robinson to the spacer at corners of the spacer. The motivation would have been: the upper and lower facing surfaces of the spacer are the surfaces that contact the outer races of the ball bearings and those surfaces would be where laser welding would be required to take place to fix the outer races to the spacer, and any portion of those surfaces, including to the radially outer corner would be an obvious candidate for a laser weld location. The corner will read on the claimed sharp corner.

Allowable Subject Matter

3. Claims 3 to 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson A. Evans whose telephone number is 571-272-7574. The examiner can normally be reached on Monday to Friday, 9:00am to 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Handwritten signature of Jefferson A. Evans, consisting of a stylized 'J' followed by a series of loops and a horizontal line.

JAE

February 11, 2006

Jefferson A. Evans
Primary Examiner
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**JEFFERSON EVANS
PRIMARY EXAMINER**